

ReadmeGPC-2.pdf for download of results of the Genetics of Personality Consortium**INTRODUCTION**

The Genetics of Personality Consortium (GPC) is a large collaboration of genome-wide association studies for personality. The aim of the GPC is to detect genetic variants associated with personality traits, and to understand the molecular genetic basis of personality traits.

This readme file describes the results of the second meta-analysis of GWAS studies (GPC-2), in which 30 cohorts from across the United States, Europe and Australia participated (29 discovery cohorts and 1 replication cohort). Phenotypic harmonization of personality item data has been conducted for Neuroticism and Extraversion in the 29 discovery cohorts. This was followed by a 1000G-based GWAS meta-analysis of the harmonized phenotypes in the 29 discovery cohorts, and replication of top hits in the replication cohort.

Summary statistics data of the GWAS meta-analyses of the 29 discovery cohorts are made available for download. Please note that these data represent the results of the full meta-analysis (i.e. for all variants for which results are available).

DISCLAIMER

These data are made available without warranty, and for scientific and educational use only. It is your own responsibility to use the data correctly. If you download these data, you acknowledge that you use these data only for scientific or educational purposes, and that in case these data end up directly or indirectly in a scientific publication (e.g. journal article, meeting poster or presentation), the appropriate GPC publication is cited (see under REFERENCES below).

To prevent identifiability of individual participants, we only distribute summary statistics data.

DOWNLOAD FILES

The following files are available for download:

<i>GPC-2.NEUROTICISM.full.txt</i>	<i>available</i>
<i>GPC-2.EXTRAVERSION.full.txt</i>	<i>to be made available</i>

The files can be downloaded from the following URL:

<http://www.tweelingenregister.org/GPC>

The files contain the following information (columns):

SNPID CHR BP A1 A2 BETA SE PVALUE NCOH MAF

SNPID	rs-number of the SNP
CHR	chromosome number on which the SNP is located (build 37, hg19)
BP	base pair position of the SNP (build 37, hg19)
A1	effect allele of the SNP
A2	non-effect allele of the SNP

BETA	pooled effect size (unstandardized regression coefficient)
SE	standard error of the pooled effect size
PVALUE	p-value associated with the pooled effect size
NCOH	number of cohorts for which SNP association results are available
MAF	minor allele frequency of the SNP in the 1000G phase 1 v3 reference set

REFERENCES

van den Berg SM, de Moor MH, McGue M, Pettersson E, Terracciano A, Verweij KJ, Amin N, Derringer J, Esko T, van Grootenhuis G, Hansell NK, Huffman J, Konte B, Lahti J, Luciano M, Matteson LK, Viktorin A, Wouda J, Agrawal A, Allik J, Bierut L, Broms U, Campbell H, Smith GD, Eriksson JG, Ferrucci L, Franke B, Fox JP, de Geus EJ, Giegling I, Gow AJ, Grucza R, Hartmann AM, Heath AC, Heikkilä K, Iacono WG, Janzing J, Jokela M, Kiemeney L, Lehtimäki T, Madden PA, Magnusson PK, Northstone K, Nutile T, Ouwens KG, Palotie A, Pattie A, Pesonen AK, Polasek O, Pulkkinen L, Pulkki-Råback L, Raitakari OT, Realo A, Rose RJ, Ruggiero D, Seppälä I, Slutske WS, Smyth DC, Sorice R, Starr JM, Sutin AR, Tanaka T, Verhagen J, Vermeulen S, Vuoksimaa E, Widen E, Willemse G, Wright MJ, Zgaga L, Rujescu D, Metspalu A, Wilson JF, Ciullo M, Hayward C, Rudan I, Deary IJ, Räikkönen K, Arias Vasquez A, Costa PT, Keltikangas-Järvinen L, van Duijn CM, Penninx BW, Krueger RF, Evans DM, Kaprio J, Pedersen NL, Martin NG, Boomsma DI. (2014). Harmonization of Neuroticism and Extraversion phenotypes across inventories and cohorts in the Genetics of Personality Consortium: an application of Item Response Theory. *Behavior Genetics*, 44(4), 285-313.

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Antonio Terracciano, Matt McGue, Brenda W.J.H. Penninx, Nicholas G. Martin, Dorret I. Boomsma (2014). Genome-wide association study identifies novel locus for neuroticism and shows polygenic association with Major Depressive Disorder. *JAMA Psychiatry*, under revision.

Stéphanie M. van den Berg, Marleen H.M. de Moor, Karin J.H. Verweij, Robert F. Krueger, Michelle Luciano, Alejandro Arias Vasquez, Lindsay K. Matteson, Jaime Derringer, Tõnu Esko, Najaf Amin, Scott D. Gordon, Narelle K. Hansell, Amy B. Hart, Ilkka Seppälä, Jennifer E. Huffman, Bettina Konte, Jari Lahti, Minyoung Lee, Mike Miller, Teresa Nutile, Toshiko Tanaka, Alexander Teumer, Alexander Viktorin, Juho Wedenoja, Goncalo R. Abecasis, Daniel E. Adkins, Arpana Agrawal, Jüri Allik, Katja Appel, Timothy B. Bigdeli, Fabio Busonero, Harry Campbell, Paul T. Costa, George Davey Smith, Gail Davies, Harriet de Wit, Jun Ding, Barbara E. Engelhardt, Johan G. Eriksson, Msc Iryna O. Fedko, Luigi Ferrucci, Barbara Franke, Ina Giegling, Richard Grucza, Annette M. Hartmann, Andrew C. Heath, Kati Heinonen, Anjali K. Henders, Georg Homuth, Jouke-Jan Hottenga, Joost Janzing, Markus Jokela, Robert Karlsson, John P. Kemp, Matthew G. Kirkpatrick, Antti Latvala, Terho Lehtimäki, David C. Liewald, Pamela A.F. Madden, Chiara Magri, Patrik K.E. Magnusson, Andrea Maschio, Sarah E. Medland, Evelin Mihailov, Yuri Milaneschi, Grant W. Montgomery, Matthias Nauck, Klaasjan G. Ouwens, Aarno Palotie, Erik Pettersson, Ozren Polasek, Yong Qian, Laura Pulkki-Råback, Olli T. Raitakari, Anu Realo, Richard J. Rose, Daniela Ruggiero, Carsten O. Schmidt, Wendy S. Slutske, Rossella Sorice, John M. Starr, Beate St Pourcain, Angelina R. Sutin, Nicholas J. Timpson, Holly Trochet, Sita Vermeulen, Eero Vuoksimaa, Elisabeth Widen, Msc Jasper Wouda, Margaret J. Wright, Lina Zgaga, Generation Scotland, David Porteous, Alessandra Minelli, Abraham A. Palmer, Dan Rujescu, Marina Ciullo, Caroline Hayward, Igor Rudan, Andres Metspalu, Jaakkö Kaprio, Ian J. Deary, Katri Räikkönen, James F. Wilson, Liisa Keltikangas-Järvinen, Laura J. Bierut, John M. Hettema, Hans J. Grabe, Cornelia M. van Duijn, David M. Evans, David Schlessinger, Nancy L. Pedersen, Antonio Terracciano, Matt McGue, Brenda W.J.H. Penninx, Nicholas G. Martin, Dorret I. Boomsma (2014). Meta-analysis of genome-wide association studies for extraversion: Findings from the Genetics of Personality Consortium. *Behavior Genetics*, under revision.

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All co-authors on the publications under REFERENCES have seen this document, and approved with making the summary statistics of the GWAS meta-analyses available for download.